

Potable Digital TV DTV 2504M

User Manual



Important safety instruction

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.

Caution: “To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.”

6. Clean only with dry cloth.
7. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
8. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
9. Only use attachments/accessories specified by the manufacturer.
10. Unplug this apparatus during lightning storms or when unused for long periods of time.
11. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Precautions:

1. This product is fragile, so you need to place it to a place relatively flat. It cannot suffer the collision due to falling.
2. This product should be protected against damp, and it will be damaged when damp or liquid gets inside.
3. The screen (LCD panel) of this product is made of glass, which can easily be damaged by abnormal external force or sharp object.
4. Never press the LCD, lest it may be damaged.
5. This product is hot-swappable. However, it is suggested to power off this product before plugging/unplugging your memory card, to protect the memory card or other devices.
6. We strongly recommend you to use the power adapter delivered with this product to ensure the display effect.
7. To clean the screen, cut off the power supply first and use lightly wet soft cloth to wipe it. Never apply alcohol, gasoline or other chemical agents.
8. To ensure normal operations of this product and avoid any accident, do not use or store this product under the following conditions:
The environment with too low/high temperature;
The place with heavy dampness or long-term direct sunshine;
The bad conditions such as strong shock.
9. During the operation, this product may heat lightly, which is normal.
10. When the product is not used for long time, please pull the adapter cable out of the frame.
11. According to the manufacturer, for the colored LCD, 0.01% of pixel-sum flaw rate is allowable. Your understanding is appreciated.

Statement:

Both product and user's manual are subject to further improvement or supplement without further notice.



This product complies with ROHS environmental protection requirements.



■ If at any time in the future you should need to dispose of this product please note that:
Waste electrical products should not be disposed with household waste.

Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice. (Waste Electrical and Electronic Equipment Directive).

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Product Introductions

The DTV 2504M features 4.3-inch digital TFT-LCD panel and built-in multimedia technology. It has the following key features:

- DVB-T Program Play.
- Schedule List AutoSave, and Program Information View.
- Picture Viewing/Rotating/Zooming, and Slide Show Mode.
- MP3/WMA music playing, and support different genres.
- RM/RMVB/WMV video playing, support video out and two display mode.
- E-book.
- Record.
- D/MMC memory card reader.
- Built-in Memory.
- Built-in Speaker.
- Mini-USB 2.0 High-Speed Interface.

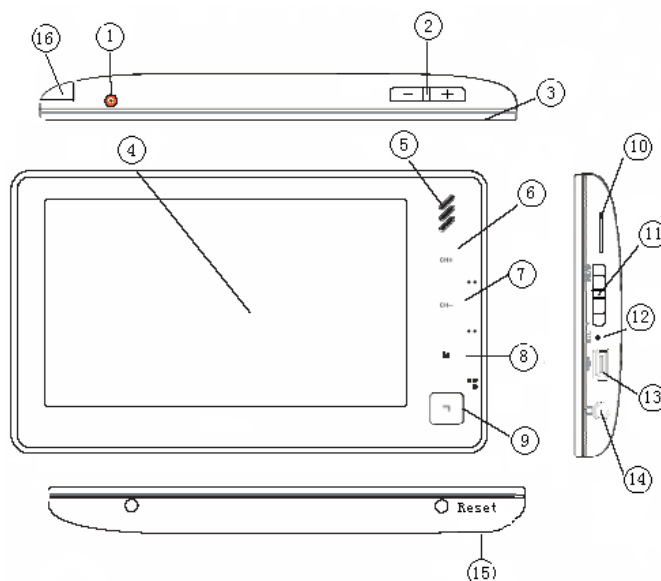
Packing List

- Potable Digital TV *1 ●Power Adapter *1 ●USB Cable *1
- User Manual *1 ●Earphone*1

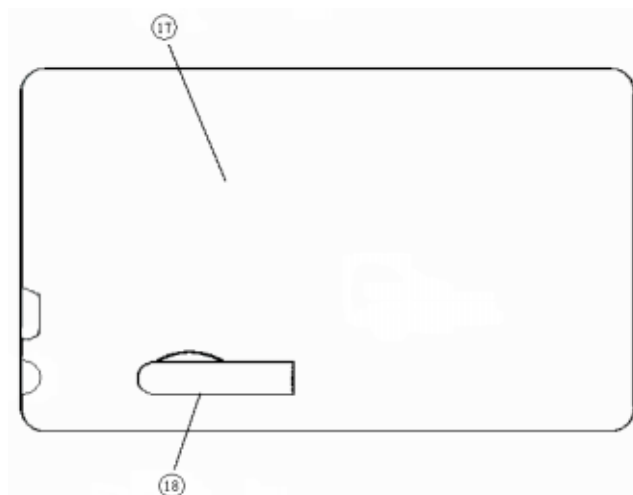
Note: Packing list mentioned above is just for your reference, and it is subject to the actual package.

Identifying the Parts

1. External Antenna Port
2. VOL+/VOL-
3. Middle frame
4. 4.3-inch LCD
5. Speaker
6. CH+
7. CH-
8. Confirm/MENU
9. Return
10. Micro SD (TF) jack
11. Power ON/OFF/HOLD



12. MIC(support record function)
13. USB Port
14. Earphone
15. Reset
16. Build-in Antenna
17. Rear panel
18. Stand



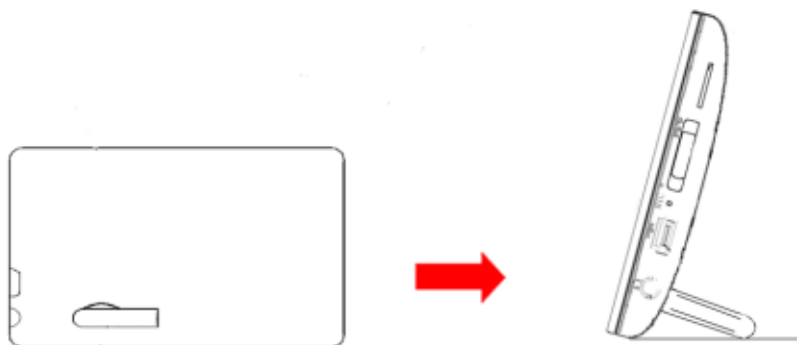
Button Introduce

	VOL+/-	1、Photo View: Switch left/right ; 2、Increase/ decrease the volume; 3、Photo Zoom In: Hold pressing the button to view photos left/right 4、Main menu mode: Move up/ Move down
	POWER ON/ OFF/HOLD	1、Push up and hold on for 2sec,power on; When power is on: Push up and hold on for 4sec, power is off. 2、 Music/Video Mode: Push up to play/pause music or video. 3、 Push to HOLD direction to forbid action of all buttons.
	Return	1、 Exit current menu or return to previous menu.
M	Confirm/MENU	1、 Confirm current selection 2、 Enter into setting menu.
CH+	Channel Down	1、 TV Mode: Select next channel; 2、 Photo View: select next file Photo Zoom In: Hold pressing this button to move up; 3、 Music/Video Mode: Switch to next file, and Hold pressing this button for 2sec to fast forward the play back.
CH-	Channel Up	1、 TV Mode: Select previous channel; 2、 Photo View: select previous file Photo Zoom In: Hold pressing this button to move up; 3、 Music/Video Mode: Switch to previous file, and Hold pressing this button for 2sec to fast rewind the play back.
Reset	Reset Button	When unit out of work, press this button to reset.

Installing

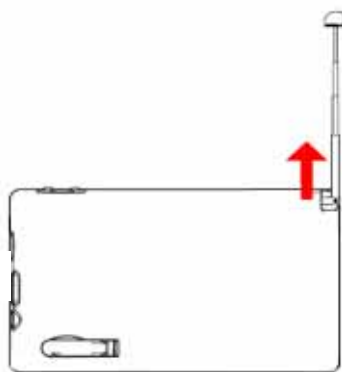
1. Installing Stand

Open the stand and put the TV unit on the desk just like the figure shows:



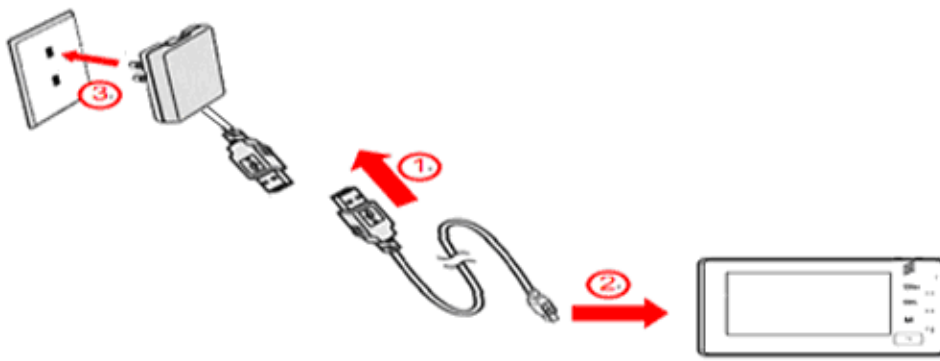
2. Antenna

Before playing broadcast programs, pull out the antenna first until the axletree comes out; then adjust the antenna to have a good reception.



3. About Rechargeable Battery

Your portable TV device comes with a built-in rechargeable Lithium-Ion battery. Charge the battery fully before initial use. When battery is weak, please charge with AC adapter just as below:



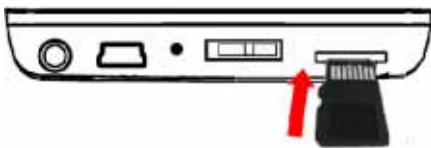
Connect the USB cable to the power adapter, and then connect the Mini port to DTV 2504M mini USB jack, at last plug the two prong end to the grounded electrical socket. When charge is beginning, figures will show as below.



TIP: Charge time should be 5 hours, when charge has done; the charge full figure of battery will appear. It's normal that TV unit has a little temperature up.

4. Inserting Cards

This product supports SD/MMC (TF) memory card (**The card should be purchased separately**).



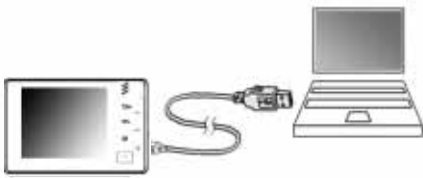
- Insert the memory card into the right slot as shown in the illustration.
If the card is improperly inserted, it may not function properly.
- Remove the memory card: Push the card forward and then disentangle the card will come out, so you can pull the card out.
- It is recommended to not remove the memory card when a file is being played.



Tip: Since there are many memory card brands, it is recommended to test whether a card is compatible with this product. (Note: This product does not support illegal cards) If the card is inserted correctly and the startup picture is displayed but the card fails to read, it is recommended that you shut down and restart the unit or reformat the card before writing files onto it, if system had been frozen, press RESET to restart.

5. Downloading Files from Computer

The device features built-in memory. You can copy files from the computer to the device with USB cable.



- Turn on your computer and product;
- Connect the device to computer with provided USB cable.
- Transfer files between the device and the computer.
- Before pull out USB cable please click to the icon , and when “**safe delete**” appears, you can pull out the USB cable



Tip: This product supports Windows 2000/XP. When formatting the memory card, ensure that FAT or FAT32 file system is used. As the difference in calculation method and system files take up some memory space, the actual memory capacity will be less than the nominal capacity, which is normal.



Warning:

1. Formatting need to be cautious, note that back up important data.
2. Do not pull out USB cable when data transfer, and please ensure "safely delete disk", before you pull out USB cable, avoid the data broken!

Operation

Power on: When Power is off, push  up and hold it for 2sec, power is on.

Power off: When power is on, Push  up and hold for 4sec, power is off.

I . Function Select

You can enjoy your desired function mode from the main menu. The main menu provides several functions for you: **DVB-T, Music, Video, Photo, Record,eBook, , Explorer and Settings.**



- Press **CH+/-** to select a function;
- Press **+/-** to move up or down;
- Press **M** to access the selected item.

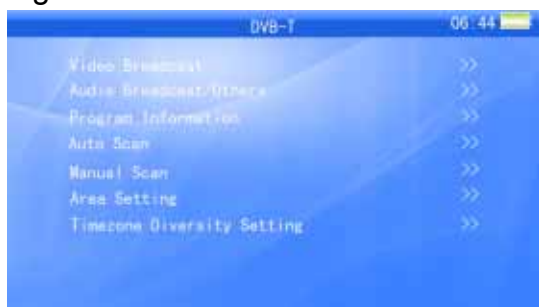
Function list:

	DVB-T	DVB-T Menu: search and play video and audio broadcasting.
	Music	Music Menu: play music files of internal memory or memory card
	Video	Video Menu: play video files of internal memory or memory card
	Photo	Photo View: play photo files of internal memory or memory card
	Record	Record Menu: record sound, and play
	e-Book	E-book Menu: play word files of internal memory or memory card
	Explorer	All Files Browse: You can administer all files or delete any.
	Settings	Set the parameter of unit system

II . DVB-T



Pull out the antenna, Select “” from the main menu, and press **M** to enter the DVB-T digital TV mode.



Function List:

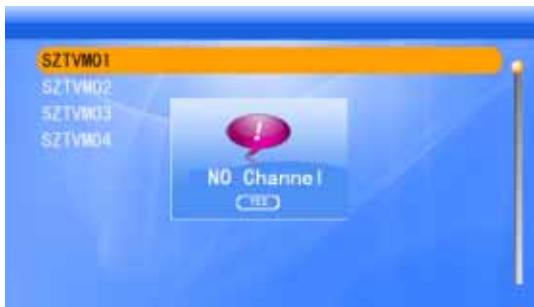
- Press **CH+/-** to select.
- Press **M** to confirm selection.
- Press  to return to main menu.

1.Video Broadcast



Video Broadcast Mode: If TV programs has been found, there will be a list:

- Press **CH+/-** to select.
- Press **M** to play selection.
- Press  to return to main menu.



If there's no program list, there will be a warning "Search program first".

Now please select Auto Scan or Manual Scan to begin TV programs searching.

If the signal is weak, or you have not searched TV programs, there will be a warning "NO channel".



- Press **CH+/-** to select previous or next program.
- Press **+/-** to increase or decrease volume.
- Press **M** to show program information and list.

In Program List:

- Press **CH+/-** to select.
- Press **M** to confirm selection.
- Press  to exit.

2.Audio Broadcast/Others

Audio Broadcast Mode: If programs has been found, there will be a list; if not, there will be a TIP: "NO Channel", please select **Auto Scan** or **Manual Scan** to begin programs searching. If searching has done, there will be a program list:

Program List:



- Press **CH+/-** to select program.
- Press **M** to confirm selection.

- Press  to exit.

In Audio Broadcast Play Window:

- Press **CH+/-** to switch previous or next program
- Press **+/-** to increase or decrease volume.
- Press  to exit.

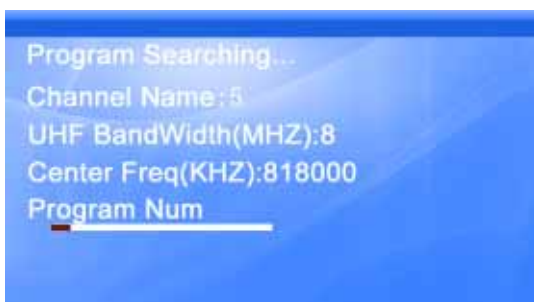
3.Program Information

You can preview programs of TV channel by selecting "Program Information" and then press **M** to confirm. The program schedule of the selected channel will be listed. If there is not program found, there will be a warning "Search program first".

In Program Information Menu:

- Press **CH+/-** or **+/-** to select
- Press  to exit.

4.Auto Scan



In Auto Scan Menu:

It is searching automatically. "Program Num" shows current programs have been found.

If there is no channel found, there will be a warning "NO Channel".

- Press  to exit.

5.Manual Scan



Press **CH+/-** to select;
Press **+/-** to switch pages;
Press **M** to confirm;
Press  to exit.

6.Area Setting



Press **CH+/-** to select;
Press **M** to confirm;
Press  to exit.

7.Timezone Diversity Setting



Press **CH+/-** to select;
Press **M** to confirm;
Press  to exit.

III . Photo



Select , if you inserted a memory card, you should see two folders named Flash and SD Card (or MMC Card) when you enter the photo mode. To play photos in the internal flash memory, select “Flash”; to play photos in the memory card, select “SD Card” (or “MMC Card”).

The device displays photos in 4*3 thumbnail view window.



In the Photo View Window:

- Press **CH+/-** and **+/-** to select.
- Press **M** to view the selected photo.
- Press  to return to main menu.

If there is no photo file or no picture meets the requirement of format, you should see the warning: **"There is no file!"**

If the picture you have selected (press **M**) has broken or the picture not meets the requirement of format, you should view the warning picture .



View The Photo:

When view the photo, you can:

- Press **CH+/-** to select previous or next photo (signal photo view mode).
- Press **M** to enter into photo setting menu.
- Press  to exit.

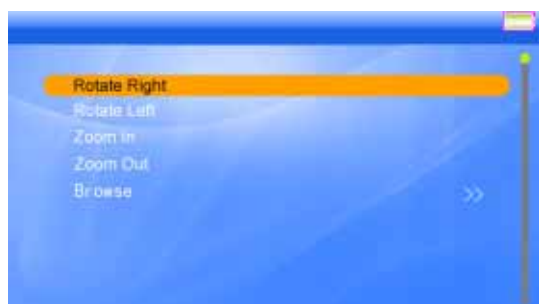


Photo Setting Menu:

- Press **CH+/-** to select.
- Press **M** to confirm selection.
- Press  to exit.

Photo Setting List:

Rotate Right	Rotate photo clockwise	Tips: only the photo's resolution more than 480×272, JPEG/BMP photo can support function. Gif format cannot support the function of Rotation and Zoom
Rotate Left	Rotate photo.	
Zoom In	Zoom in the photo	
Zoom Out	Zoom out the photo	
Browse	Set View Mode as turn on means automatic slide show; turn off means signal browse. Automatic Slide Show Spacing Time:5sec,10sec,20sec.	

IV . MUSIC

Select , and press **M** to enter the music mode.

- Press **CH+/-** to select.
- Press **M** to confirm.
- Press  to return to main menu.

Resume Play	Resume playing from the point where the music stop last time
All Music	Show all music files in the internal memory

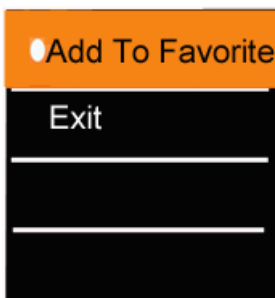
Artist	Play tracks by artist
Album	Play tracks by album
Genre	Play tracks by genre selected
My Favorite	Show My Favorite tracks
Record	Play record files.
Dir List	Enter the folder navigation mode
Media-Lib Update	Update the music library of the internal memory



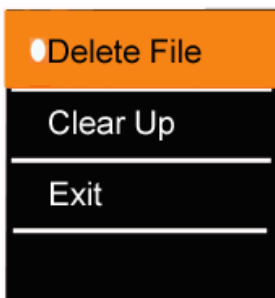
- You could see the music list under the selected category. **In the music list:**
- Press **CH+/-** to select file.
- Press **M** to play selection.
- Press  to exit.

If there isn't memory device connecting to the unit or no music meets the requirement of format, you should see the warning: "There is no file!"

You can collect your favorite tracks to My Favorite directory.



- (1) In the music list, select one of your favorite tracks. Press **-** to display the submenu.
- (2) Select **"Add to Favorite"** and then press **M** to confirm.
- (3) To play your favorite tracks, select **"My Favorite"** from the music category list, and then press **M** to confirm.
- (4) You should see all of your favorite tracks are listed. Press **CH+/-** to select a track and then press **M** to play.



You can delete music in My Favorite directory.

- (1) To delete one favorite track from the list, select the track that you want to delete, press **-** to display the submenu, select **"Delete File"** and then press **M** to confirm.
- (2) To delete all favorite tracks from the list, press **+** to display the submenu, select **"Clear Up"** and then press **M** to confirm.

In the music playing screen:

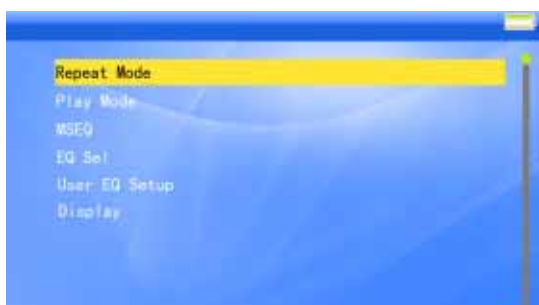
- Press **CH+/-** to select previous or next music.
- Press and hold on **CH+/-** to fast rewind or forward the playback .
- Press **+/-** to increase or decrease volume.
- Push  up to play music or pause.
- Press **M** to open music setting menu.

- Press and hold **M** to repeat: Once and then release, confirm the starting point A, once again, confirm the ending point B; the last once, exit the setting.
- Press  to exit.



①	Equalizer mode Microsoft EQ、Rock、Pop、Classic.etc.
②	Current Bit rate and Sample rate.
③	Item of current music.
④	Playing time bar.
⑤	Time Bar of file played.
⑥	Play/Pause.
⑦	Fast rewind playback.
⑧	Forward the playback.
⑨	Single Music Repeat Mode: Set the repeat point of single music.
⑩	Repeat Mode: Set the repeat mode of the music playing.
⑪	Play Setting: Set the play mode of the music playing as Order or Random.
⑫	File Length.
⑬	Volume Display.
⑭	Display: Enable or disable the ID3 information display.
⑮	Current Music Format

Music Setting Menu:



When playing music: press **M** to open music setting menu.

- Press **CH+/-** to select.
- Press **M** to enter into submenu.
- Press  to exit.

Repeat Mode	Set the repeat mode of the music playing
Play Mode	Set the play mode of the music playing :Order or Random
MSEQ	Set the equalizer mode as Microsoft EQ
EQ Sel	Select a preset equalizer mode
Display	Enable or disable the ID3 information display
UserEQ Setup	Set user-defined equalizer

V . Video



Select  and then press **M** to enter the video playing mode.

(1). If external memory device have been inserted, you should see two folders named Flash and SD Card (or MMC Card) when you enter the video mode. To play video files stored in the internal flash memory, select “Flash”; to play video files stored in the memory card, select “SD Card” (or “MMC Card”).

(2). The video list should display after you select the memory device.

In the video list:



- Press **CH+/-** to select a video file.
- Press **M** to play files selected.
- Press  to return to main menu.

If there isn't memory device connecting to the unit or no video meets the requirement of format, you should see the warning: "**There is no file!**"

Play the Video:



- Press **CH+/-** to play the previous or next video.
- Press and hold **CH+/-** to fast rewind or forward the video playing.
- Press **+/-** to adjust the volume.
- Push  up to play or pause.
- Press  to exit.

If power isn't off, system will record the situation of video playing, to play video again, there will be a tip "Continue Last Play", select "YES" to continue last playing, select "NO" to start from scratch.

When in the video playing, Press **M** to enter into video setting menu:

- Press **CH+/-** to select options
- Press **M** to confirm selection.
- **Select Time Play:** You can directly select the set time to play video.
Press **+/-** to switch unit of hour and minute, press **CH+/-** to adjust time. Press **M** to confirm.
- **Screen Size Setting:** Full Screen or Normal.



TIP: Because encoding format of video may be various, and there will be problem of coding compatibility, we can not ensure that all video files which measure up standard can be played glibly. Please transform the format if it is not in suitable format range. It is normal that a few video files can not carry out the especial functions such as: fast rewind or forward.

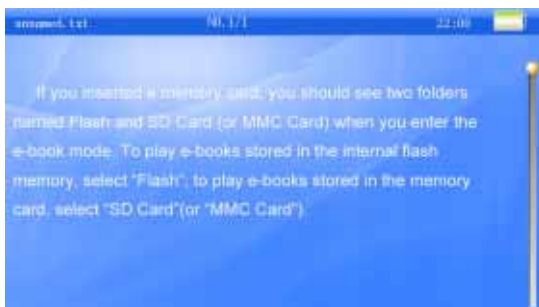
VI . E-BOOK



Select  and press **M** to enter the e-book reading mode.

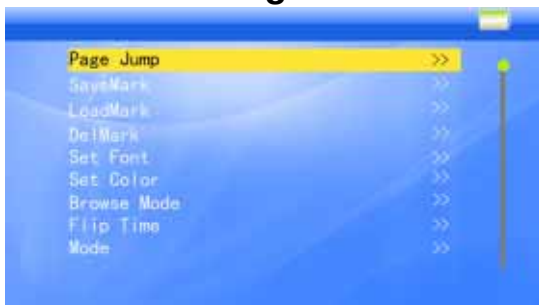
If you inserted a memory card, you should see two folders named Flash and SD Card (or MMC Card) when you enter the e-book mode. To play e-books stored in the internal flash memory, select "Flash"; to play e-books stored in the memory card, select "SD Card" (or "MMC Card"). The e-book list should display after you select the storage device. Press **CH+/-** to select an e-book and then press **M** to read it.

When reading, you can:



- Press **CH+/-** to read the previous or next line
- Press **+/-** to read the previous or next page.
- Press **M** to open E-BOOK setting menu.
- Press  to exit.

E-BOOK setting menu:



- Press **CH+/-** to select a tool.
- Press **M** to open submenu or confirm selection.
- Press  to exit.

Page Jump	Jump to page selected. Press   to move cursor. Press CH+/- to adjust number, Press M to confirm.
Save Mark	Save current photo as bookmark. Press CH+/- to select position. Press M to confirm.
Load Mark	Pick-up bookmark which has been saved.
Del Mark	Delete bookmark which has been saved.
Set Font	Setup font size of the text.
Set Color	Setup font color of the text.
Browse Mode	Include Auto-mode and Manuel-mode
Flip Time	Set auto-paged time.
Mode	Change color of your back ground



TIP: You can read E-book with music playing.

VII . Record



Select  and press **M** to enter the recorder mode.

- Push  up to begin or stop recording.
- Press  to exit; system will remind you to save files of recorded.
- Press **M** to set record options. (Before record begins)



Record Setting Menu:

- Press **CH+/-** to select options.
- Press **M** to enter into option should be set.

Record Function Menu:

Quality	There are two: low rate and high rate.
Volume	Set the volume of record.
Desktop	Set the desktop of record.

VIII . Explorer



Select  and press **M** to enter the explorer mode. If you inserted a memory card, you should see two folders named Flash and SD Card (or MMC Card) when you enter the e-book mode. To play e-books stored in the internal flash memory, select “Flash”; to play e-books stored in the memory card, select “SD Card”(or “MMC Card”).



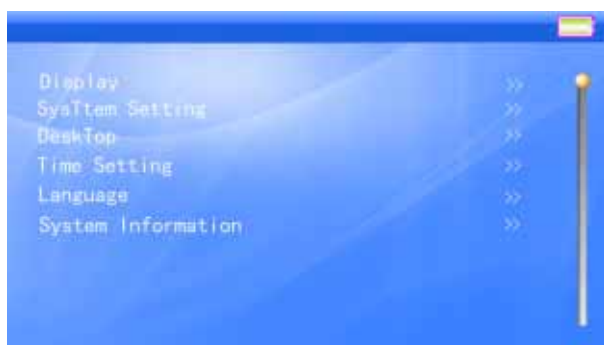
- Press **CH+/-** to select a folder or file.
- Press **M** to confirm.
- Press  to exit.



Delete Files: In the file list, Press **CH+/-** to select the file that you want to delete. Press the - button to display the submenu.

Select “**Delete File**” from the submenu, and press **M** to confirm.

IX . System Setting



Select  and press **M** to enter the system setting mode.

- Press **CH+/-** to select a setting item.
- Press **M** to confirm selection.
- Press  to exit.

Display Setting	Light Time	5sec/10sec/15sec/20sec/30sec/Always On
	Brightness	One/Two/Three/Four/Five
	Light Mode	All Dark or Penumbra
	Display status	Hide or Display
System Setting	Upgrade	
	Restorable	
Desktop	Desk1,Desk2,Desk3,Desk4,Desk5,Desk6,Desk7,Desk6	
Time Setting	Set time and date of system	
Language	Set the language which displayed on OSD.	
	Set the language of Code Page.	
System Information	Show the software version and the other system information.	

Trouble Shooting

Description	Possible reason	Settlement
Can not power on.	Battery has no power and didn't connect power adaptor well.	Check the connection of the power cable and charge battery.
Can not find files in card.	The card has been reversed, or cannot suit the product.	Insert the card correctly, or format the card.
Picture or video doesn't full the screen.	The resolution of the file is not suitable.	Change the file's resolution.
Can't play the video.	The resolution of the file is not suitable.	Change the file's resolution.
Can't play the music file correctly.	The file is damaged or the format code is wrong.	Change the file.
Can not input document when the memory is not used completely.	There is some remnants documents garbage in memory.	Connect to compute to clean up the disk, or format the memory.

Technical Specifications

LCD Panel	LCD Model Size	4.3-inch Digital TFT LCD		
	Active area	95.04(W) ×53.856(H) mm		
	Resolution	480RGB x 272		
DVB-T	frequency range	470MHz-798MHz		
	modulate parameter	16QAM, 64QAM, QPSK		
	LDPC coding	1/2 and 3/4		
	receive sensitive degree	More than -80dbm in closed loop testing condition		
Picture Playback	Format	JPEG	BMP	GIF
	Parameter	Only support Baseline format less than 8 mega pixels	The most Resolution 3264*2448	The most Resolution 999 x 999
E-BOOK format	TXT encoded by ANSI, the size should less than 1MB.			
Video Playback	file postfix	video code	video parameter	audio style
	*.AVI	Xvid, Divx3/4/5, MS MPEG-4 v3 Not support GMC,QPEL &Interlacement)	Most 720x480 Resolution≤25fps, ≤1.2Mbps	MP3, AC3, MS-ADPCM
	.RM/ .RMVB	Real Video Codec 8/9/10 (not support G2)	Most 720x480 Resolution≤25fps, ≤1Mbps	Real Audio
	*.WMV	WMV 7/8/9 (Don't support high profile, VC-1)	Most 640x480 Resolution, ≤25fps, ≤1Mbps	WMA
	*.FLV	Sorenson H.263 (Don't support O2 VP6)	Most 640x480 Resolution, ≤25fps, ≤800Kbps	MP3
	.DAT/ .MPG	MPEG-I	Most 640x480 Resolution, ≤25fps,≤1Mbps	Mpeg layer2
Audio Playback	file postfix	audio code	parameter	
	*.MP3	MPEG1/2/2.5,Audio Layer 3	Bit rate 96~320Kbps, CBR and VBR; Sampel rate 8-48KHz	
	*.WMA	Version 7/8/9 (Don't support WMA Pro and WMA lossless)	Bit rate 80Kbps~192kbps; Sampel rate 8-48KHz	
	*.WAV	MS-ADPCM,IMA-ADPCM,PCM	4bit MS-ADPCM,IMA-ADPCM; Sampel rate 8-48KHz	
	*.APE	Ver. 3.95/3.97/3.98/ 3.99 等级为 normal or fast	Sampel rate 8-48KHz	
	*.FLAC	FLAC	Sampel rate 8-48KHz	
	*.OGG	Q-1- Q10	Sampel rate 8-48KHz	
	*.AAC	ADIF ,ATDS Header AAC-LC and AAC-HE	Sampel rate 8-48KHz	

Electric Specification	Power input	DC5V 1A	
	Power Consumption	≦5W.	
	Adapter	Input	AC100-240V +/- 10%, 50/60 Hz, Max.0.35A
		output	DC5V, 1A
	Battery	Description	Chargeable polymer-lithium-ion cell, 3.7V, 1200mAh Charge time should be 5 hours
		Work time	2 hours when play ISDB-T video. Play music without backlight, can continue use about 15 hours. Test evolvement is: Temperature: 25°C, volum: 16 Earphone output. In the station of continue playing, Audio MP3 bit rate is 128Kbps, file of video Real Video 9 Coding-RMVB coding is 451Kbps
Audio output	Earphone output	32Ω stereo sound	
	Build-in speaker	8Ω±15%at1kHz /0.8W x1	
Memory Support	Memory	NAND Flash, Capacity please references the packing.	
	Memory card	Supports TF (Micro SD) card Up to 16GB.	
Interface	USB	USB 2.0 interface (connect with PC) USB1.1 is compatible.	
Product size	124(Length) × 74(Wight) × 13.5(Thick) mm		
Weight	About 140g.		
Environment requirement	Work temperature/humidity	Temperature: 0°C~40°C Humidity: <75%.	
	Reserve temperature/humidity	-20°C~60°C Humidity: <75%	